



ALTERNATIVE TO PTO/SB/08a/b (07-05)

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/519,121	
			Filing Date	September 15, 2003 (PCT/US03/29361)	
			First Named Inventor	Marc K. HELLERSTEIN	
			Art Unit	1638	
Examiner Name	C. E. Collins				
Sheet	1	of	2	Attorney Docket Number	416272003900

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
BS ↓ ↓	1.	US-5,167,948	12-01-1992	Wenzel	
	2.	US-6,071,245	06-06-2000	Kohno et al.	
	3.	US-6,329,208	12-11-2001	Jones et al.	
	4.	US-2006/0029549-A1	02-09-2006	Hellerstein	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY			

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
BS ↓ ↓ ↓ ↓	5.	GUO, Z.K. et al., (2000) "De novo lipogenesis in adipose tissue of lean and obese women: application of deuterated water and isotope ratio mass spectrometry," International Journal of Obesity, 24: 932-937	
	6.	HELLERSTEIN, Marc K. et al. (1986) "Glycoconjugates as Noninvasive Probes of Intrahepatic Metabolism: Pathways of Glucose Entry into Compartmentalized Hepatic UDP-glucose Pools during Glycogen Accumulation." Proceedings of the National Academy of Sciences of the United States of America 83, Issue 18: 7044-7048	
	7.	HELLERSTEIN, Marc K. et al. (1997) "Measurement of Hepatic Ra UDP-glucose in Vivo in Rats: Relation to Glycogen Deposition and Labeling Patterns" Am. J. Physiol. 272: E155-E162	
	8.	HELLERSTEIN, Marc K. et al. (1999) "Mass Isotopomer Distribution Analysis at Eight Years: Theoretical, Analytic, and Experimental Considerations. Am. J. Physiol. 276: E1146-E1170	
	9.	HELLERSTEIN, Marc K. (2004) "New stable isotope-mass spectrometric techniques for measuring fluxes through intact metabolic pathways in mammalian systems: introduction of moving pictures into functional genomics and biochemical phenotyping," Metabolic	

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
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		Engineering, 6: 85-100	
B9	10.	MORSCHES, Bernhard (1976) "Tierexperimentelle Untersuchungen über die Beziehungen zwischen der Hydroxyprolinausscheidung im Urin und den Hydroxyprolinfraktionen im Serum," Der Hautarzt, 27: 234-242	
↓	11.	RAVICHANDRAN, L.V. et al., (June 1991) "In vivo labeling studies on the biosynthesis and degradation of collagen in experimental myocardial infarction," Biochemistry Journal, 24(3): 405-414	
↓	12.	Supplementary Partial European Search Report mailed March 9, 2006, for European patent application no. EP 03713429.3, filed February 12, 2003, 6 pages	

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				Art Unit	1616
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		Number-Kind Code ² (if known)			
DS	1.	US-4,065,552	12-27-1977	Costa	
	2.	US-4,889,126	12-26-1989	Doddrell et al.	
	3.	US-4,940,658	07-10-1990	Allen et al.	
	4.	US-5,042,488	08-27-1991	Ackerman	
	5.	US-5,209,919	05-11-1993	Turteltaub et al.	
	6.	US-5,317,098	05-31-1994	Shizuya et al.	
	7.	US-5,354,662	10-11-1994	Stone et al.	
	8.	US-5,376,355	12-27-1994	Turteltaub et al.	
	9.	US-5,394,236	02-28-1995	Murnick	
	10.	US-5,506,147	04-09-1996	Kolhouse et al.	
	11.	US-5,597,548	01-28-1997	Sherry et al.	
	12.	US-5,783,445	07-21-1998	Murnick	
	13.	US-6,610,270	08-26-2003	Ajami	
	14.	US-6,625,547	09-23-2003	Korzekwa et al.	
	15.	US-6,764,817	07-20-2004	Schneider	
	16.	US-6,783,751	08-31-2004	Heumann	
	17.	US-6,872,575	03-29-2005	Regnier	
	18.	US-6,887,712	05-03-2005	Medford et al.	
	19.	US-2005/0003375	01-06-2005	Franza et al.	
	20.	US-2006/0008796	01-12-2006	Hellerstein	

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	† ²
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DS	21.	EP-0826377	11-06-2002	Tokyo Gas Co., Ltd.		
	22.	WO-93/20800	10-28-1993	Kinnunen		
	23.	WO-95/13096	05-18-1995	Peptide Delivery Systems Pty. Ltd.		
	24.	WO-00/13025	03-09-2000	University of Washington		
	25.	WO-00/63683	10-26-2000	Target Discovery Inc.		
	26.	WO-01/84143	11-08-2001	Thermo Finnigan LLC		

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Bp	27.	Australian Patent Office Search Report mailed August 26, 2005, for Singapore patent application no. SG 200500571-5, filed July 25, 2003, 5 pages	
	28.	COLLINS, Michelle L. et al. (Jan. 31, 2003) "Measurement of mitochondrial DNA synthesis in vivo using a stable isotope-mass spectrometric technique," J Appl Physiol, 94: 2203-2211	
	29.	HECK, Steven D. et al. (April 1996) "Posttranslational amino acid epimerization: Enzyme-catalyzed isomerization of amino acid residues in peptide chains," Proc. Natl. Acad. Sci. USA, 93(9): 4036-4039	
	30.	International Search Report mailed August 1, 2005, for PCT application no. PCT/US2005/08265, filed March 11, 2005, 4 pages	
	31.	LUTTON, C. et al. (1990) "Critical analysis of the Use of 14C-acetate for Measuring In Vivo Rat Cholesterol Synthesis," Reprod Nutr Dev, 30: 71-84	
	32.	OUGUERRAM, K. et al. (Jan. 2002) "A New Labeling Approach Using Stable Isotopes to Study In Vivo Plasma Cholesterol Metabolism in Humans," Metabolism, 51(1): 5-11	
	33.	PATTERSON, Bruce W. et al. (Aug. 1997) "Measurement of Very Low Stable Isotope Enrichments by Gas Chromatography/Mass Spectrometry: Application to Measurement of Muscle Protein Synthesis," Metabolism, 46(8): 943-948	
	34.	ROOYACKERS, Olav E. et al. (Oct. 1996) "Tracer Kinetics Are of Limited Value to Measure In Vivo Protein Synthesis and Degradation Rates in Muscle of Anesthetized Rats," Metabolism, 45(10): 1279-1283	
	35.	SCHEIBNER, Jurgen et al. (1993) "Bile Acid Synthesis from Newly Synthesized Vs. Preformed Cholesterol Precursor Pools in the Rat," Hepatology, 17: 1095-1102	
✓	36.	Supplementary Partial European Search Report mailed August 17, 2005, for European patent application no. EP 03749756.7, filed September 15, 2003, 6 pages	

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ALTERNATIVE TO PTO/SB/08a/b (08-03)

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BS	1.	US-11/094,387	FD 3-29-2005	Hellerstein	

FOREIGN PATENT DOCUMENTS						
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		Country Code ² -Number ³ -Kind Code ⁴ (if known)	MM-DD-YYYY			
BS	2.	WO-05/033652-A2	04-14-2005	Hellerstein		

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BS	3.	"New Diagnostic Technique Could Help Treat AIDS," Agence France-Presse, Dow Jones News/Retrieval, Feb. 17, 1998, pp. 1-2.			
	4.	ADAMI, H.O. et al. (1995) "The Aetiology and Pathogenesis of Human Breast Cancer" <i>Mutation Research</i> 333: 29-35			
	5.	ANDERSON, R.W. et al. (1998) "Direct HIV Cytopathicity Cannot Account for CD4 Decline in AIDS in the Presence of Homeostasis: A Worst-Case Dynamic Analysis" <i>J. AIDS and Human Retrovirology</i> 17:245-252			
	6.	ASHER, E. et al. (1995) "Evaluation of Cell Death in EBV-Transformed Lymphocytes Using Agarose Gel Electrophoresis, Light Microscopy and Electron Microscopy" <i>Leukemia and Lymphoma</i> 19:107-119			
	7.	BLAU, K. and HALKET, J. eds. (1993) <u>Handbook of Derivatives for Chromatography</u> , 2nd Edition, John Wiley & Sons Ltd., England			
	8.	BUCY, R.P. et al. (1998) "Analysis of Lymph Node Biopsies in HIV Infected Patients Before and After HAART" <i>Abstract, 5th Conference on Retroviruses and Opportunistic Infections, Session 66</i> 519:177			
	9.	CALDWELL, K.A. et al. (1993) "Quantification of Peptide Isotopomer Abundances and Determination of Protein (sic) Turnover Rates by Using Mass Isotopomer Distribution Analysis" <i>Abstract, 41st Annual Amer. Society Mass Spectrometry on Mass Spectrometry</i> , p. 331a.			
✓	10.	CASSELLA, C.R. et al. (1997) "Mechanisms of Lymphocyte Killing by HIV" <i>Current Opinion in Hematology</i> 4:24-31			

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Sheet	2	of	5	Attorney Docket Number	416272003900

88	11.	CESAR, D. et al. (1998) "Direct Measurement of CD4+ and CD8+ T Cell Proliferation Rates in Vivo in AIDS Patients Using a Stable Isotope-Mass Spectrometric Technique" <i>Abstract, 5th Conference on Retroviruses and Opportunistic Infections</i> , Chicago Illinois
	12.	COHEN, A. et al. (1983) "Purine and Pyrimidine Metabolism in Human T Lymphocytes," <i>J. Biol. Chem.</i> 258(20):12334-12340
	13.	COHEN, J. (1998) "Failure Isn't What It Used to Be...But Neither is Success" <i>Science</i> 279:1133-1134
	14.	CONNERS, M. et al. (1997) "HIV Infection Induces Changes in CD4+ T-Cell Phenotype and Depletions Within the CD4+ T-Cell Repertoire that are not Immediately Restored by Antiviral or Immune-Based Therapies" <i>Nature Medicine</i> 3(5):533-540
	15.	CRAIN, P.F.(1990) "Preparation and Enzymatic Hydrolysis of DNA and RNA for Mass Spectrometry," <i>Meth. Enz.</i> 193:782-790
	16.	DEEKS, S. et al. (1998) "Viral Load and CD4+ T Cell Changes in Patients Failing Potent Protease Inhibitor Therapy" <i>Abstract, 5th Conference on Retroviruses and Opportunistic Infections, Session 53</i> , 419:158
	17.	DIMITROV, D.S. et al. (1995) Scientific Correspondence, <i>Nature</i> 375:194-195
	18.	GOROCHOV, G. et al. (1998) "Perturbation of CD4+ and CD8+ T-Cell Repertoires During Progression to AIDS and Regulation of the CD4+ Repertoire During Antiviral Therapy," <i>Nature Medicine</i> 4(2):215-221
	19.	GRATZNER, H.G. (1982) "Monoclonal Antibody to 5-Bromo-and 5-Iododeoxyuridine: A New Reagent for Detection of DNA Replication" <i>Science</i> 218:474-475
	20.	HELLERSTEIN, M.K. et al. (1997) "T Cell Turnover in HIV-1 Disease," <i>Immunity</i> 7:583-589 (Nov. 1997).
	21.	JAMES, J.S. (1998) "Clinical Implications of Virological Failure: Interview with Steven Deeks, M.D., San Francisco General Hospital," <i>AIDS Treatment News</i> , 289:6-7
	22.	LIPKIN, M. (1987) "Proliferation and Differentiation of Normal and Diseased Gastrointestinal Cells" In <i>Physiology of the Gastrointestinal Tract</i> , L.R. Johnson ed., Raven Press, New York, pp. 255-284
	23.	MARGOLICK, J.B. et al. (1995) "Failure of T-cell Homeostasis Preceding AIDS in HIV-1 Infection," <i>Nature Medicine</i> , 1(7):674-680
	24.	MCCLOSKEY, J.A. (1990) "Electron Ionization Mass Spectra of Trimethylsilyl Derivatives of Nucleosides," <i>Meth. Enz.</i> 193:825-841
✓	25.	MCCUNE, J.M. (1997) "Thymic Function in HIV-1 Disease," <i>Seminars</i>

Examiner Signature	<i>Shun R</i>	Date Considered	7/29/06
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		<i>in Immunology</i> 9:397-404	
B9	26.	MCLEAN, A.R. et al. (1995) "In Vivo Estimates of Division and Death Rates of Human T Lymphocytes," <i>Proc. Natl. Acad. Sci USA</i> 92:3707-3711	
	27.	MEIER, P.R. et al. (March 1981) "Rates of Protein Synthesis and Turnover in Fetal Life," <i>Am J Physiol.</i> , 240(3):E320-E324	
	28.	MELLORS, J.W. et al. (1995) "Quantitation of HIV-1 RNA in Plasma Predicts Outcome after Seroconversion," <i>Ann. Intern. Med.</i> 122:573-579	
	29.	MELLORS, J.W. et al. (1996) "Prognosis in HIV-1 Infection Predicted by the Quantity of Virus in Plasma," <i>Science</i> , 272:1167-70	
	30.	MICHIE, C.A. et al. (1992) "Lifespan of Human Lymphocyte Subsets Defined by CD45 Isoforms," <i>Nature</i> 360:264-265	
	31.	MOSIER, D.E. (1995) "CD4 ^{sup} + Cell Turnover," <i>Nature</i> 375:193-194	
	32.	MURALI-KRISHNA, K. et al. (1998) "Counting Antigen-Specific CD8 T Cells: A Reevaluation of Bystander Activation during Viral Infection," <i>Immunity</i> 8:177-187	
	33.	OYAIZU, N. et al. (1995) "Role of Apoptosis in HIV Disease Pathogenesis," <i>J. of Clinical Immunology</i> 15(5):217-231	
	34.	PALMER, L.D. et al. (1997) "Telomere Length, Telomerase Activity, and Replicative Potential in HIV Infection: Analysis of CD4+ and CD8+ T Cells from HIV-discordant Monozygotic Twins," <i>J. Experimental Medicine</i> 185(7):1381-1386	
	35.	PAPAGEORGOPOULOS, C. et al. (1993) "Toward the Measurement of Protein Synthesis by Mass Isotopomer Distribution Analysis (MIDA): Resolution of Isotopomers in a [d.sub.3]-Leucine Enriched Synthetic Oligopeptide Using Electrospray/Quadrupole Mass Spectrometry (ESI/MS)," <i>Abstract, Federation of American Societies for Experimental Biology</i> 1022:A177	
	36.	PATTON, G.M. et al. (July 1979) "Measurements of Fatty Acid Synthesis by Incorporation of Deuterium from Deuterated Water," <i>Biochemistry</i> , 18(14):3186-3188	
	37.	PERELSON, A.S. et al. (1996) "HIV-1 Dynamics in Vivo: Virion Clearance Rate, Infected Cell Life-Span, and Viral Generation Time," <i>Science</i> 271:1582-1586	
	38.	PERELSON, A.S. et al. (1997) "Decay Characteristics of HIV-1-Infected Compartments During Combination Therapy," <i>Nature</i> 387:188-191	
✓	39.	REICHARD, P. (1978) "From Deoxynucleotides to DNA Synthesis,"	

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		<i>Federation Proceedings</i> 37(1):9-14	
B-7	40.	REICHARD, P. (1988) "Interactions Between Deoxyribonucleotide and DNA Synthesis," <i>Ann. Rev. Biochem.</i> 57:349-374	
	41.	ROEDERER, M. (July 1995) "T-Dell Dynamics of Immunodeficiency," <i>Nature Medicine</i> 1(7):621-622	
	42.	SAWADA, S. et al. (1995) "Comparison of Autoradiography, Liquid Scintillation Counting and Immunoenzymatic Staining of 5-bromo-2'-deoxyuridine for Measurement of Unscheduled DNA Synthesis and Replicative DNA Synthesis in Rat Liver," <i>Mutation Research</i> 344:109-116	
	43.	SCALISE, K. (Feb. 11-17, 1998) "Tracking T-Cells in AIDS Patients: A Safe Reliable Method of Measuring Human Cell Generation Rates," <i>Berkeleyan</i> , p. 3.	
	44.	SHIGENAGA, M.K. et al. (1994) "Assays of Oxidative DNA Damage Biomarkers 8-Oxo-2'-deoxyguanosine and 8-Oxoguanine in Nuclear DNA and Biological Fluids by High-Performance Liquid Chromatography with Electrochemical Detection," <i>Methods in Enzymology</i> 234:16-33	
	45.	SPRENT, J. et al. (1995) "CD4+ Cell Turnover," <i>Nature</i> 375:194	
	46.	TRABER, P.G. et al. (1991) "Isolation of Intestinal Epithelial Cells for the Study of Differential Gene Expression Along the Crypt-Villus Axis," <i>Am. J. Physiol.</i> 260:G895-G903	
	47.	WADKE, M. et al. (July 1973) "Fatty Acid Synthesis by Liver Perfused with Deuterated and Tritiated Water," <i>Biochemistry.</i> , 12(14):2619-2624	
	48.	WAIN-HOBSON, S. (1995) "Virological Mayhem," <i>Nature</i> 373:102	
	49.	WALDEMAN, F.M. et al. (1991) "A Comparison Between Bromodeoxyuridine and 3 H Thymidine Labeling in Human Breast Tumors," <i>Modern Path.</i> 4(6):718-722	
	50.	WEI, X et al. (1995) "Viral Dynamics in Human Immunodeficiency Virus Type 1 Infection," <i>Nature</i> 373:117-122	
	51.	WOLTERS et al. (1998) "Rapid CD4+ T-Cell Turnover in HIV-1 Infection: a Paradigm Revisited," <i>Immunol. Today</i> 19(1):44-48	
	52.	WOLTERS, K.C. et al. (1996) "T Cell Telomere Length in HIV-1 Infection: No Evidence for Increased CD4+ T Cell Turnover," <i>Science</i> 274:1543-1547	
	53.	WOOD, H.G. et al. (1963) "Estimation of Pathways of Carbohydrate Metabolism," <i>Biochemische Zeitschrift</i> 338:809-847	
✓	54.	ZHANG, Z-Q. et al. (Feb. 1998) "Kinetics of CD4+ T Cell Repopulation	


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		of Lymphoid Tissues after Treatment of HIV-1 Infection," <i>Proc. Natl. Acad. Sci. USA</i> 95:1154-1159	
138	55.	ZILVERSMIT, D.B. et al. (1943) "On the Calculation of 'Turnover Time' and 'Turnover Rate' from Experiments Involving the Use of Labeling Agents," <i>J. of General Physiology</i> 26(3):325-331	

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ALTERNATIVE TO PTO/SB/08a/b (06-03)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/519,121
				Filing Date	September 15, 2003
				First Named Inventor	Marc K. HELLERSTEIN
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	416272003900

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
BP	1.	US-4,332,784	06-01-1982	Smith et al.	
	2.	US-5,439,803	08-08-1995	Ross et al.	
	3.	US-6,653,076	11-25-2003	Franza, Jr. et al.	
	4.	US-2003/0148533	08-07-2003	Malloy et al.	
	5.	US-2003/0180710	09-25-2003	Lee et al.	
	6.	US-2003/0180800	09-25-2003	Lee et al.	
	7.	US-2004/0091943	05-13-2004	Schneider	
	8.	US-2004/0152994	08-05-2004	Meier-Augenstein	
	9.	US-2004/0253647	12-16-2004	Mathews et al.	
	10.	US-10/523,250	FD 01-26-2005	Hellerstein	
	11.	US-10/526,860	FD 09-04-2003	Hellerstein	
	12.	US-10/872,280	FD 06-17-2004	Hellerstein	
	13.	US-11/064,197	FD 02-22-2005	Hellerstein	
	14.	US-11/078,083	FD 03-11-2005	Hellerstein	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ² -Number ⁴ -Kind Code ³ (if known)				
BP	15.	WO-90/11371	10-04-1990	Anticancer, Inc.		
	16.	WO-93/25705	12-23-1993	Barranco		
	17.	WO-03/061479-A1	07/31/2003	Hellerstein		
	18.	WO-03/068919-A2	08/21/2003	Hellerstein		
	19.	WO-03/087314-A2	10/23/2003	Hellerstein		
	20.	WO-04/003493-A2	01/08/2004	Hellerstein		
	21.	WO-04/011426-A2	02/05/2004	Hellerstein		
	22.	WO-04/021863-A2	03/18/2004	Hellerstein		
	23.	WO-04/024941-A2	03/25/2004	Hellerstein		
	24.	WO-04/025270-A2	03/25/2004	Hellerstein		
	25.	WO-04/042360-A2	05/21/2004	Hellerstein		
	26.	WO-05/009597-A2	02/03/2005	Hellerstein		
	✓	27.	WO-05/015155-A2	02/17/2005	Hellerstein	

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Examiner Signature	<i>John R.</i>	Date Considered	7/20/06
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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
BS	28.	International Search Report mailed on August 20, 2004, for PCT application no. PCT/US03/10554 filed on April 4, 2003, 4 pages	
	29.	International Search Report mailed July 8, 2004, for PCT patent application no. PCT/US03/27623 filed on September 4, 2003, 4 pages	
	30.	International Search Report mailed on March 25, 2005, for PCT application no. PCT/US04/39722 filed on November 24, 2004, 3 pages	
	31.	International Search Report mailed on April 4, 2005, for PCT application no. PCT//US04/21063 filed on June 29, 2004, 2 pages	
	32.	BLACK, G.E. et al. (January 2001) "Labeling DNA with Stable Isotopes: Economical and Practical Considerations," <i>BioTechniques</i> 30:134-140	
	33.	HO, D.D. et al. (1995) "Rapid Turnover of Plasma Virions and CD4 Lymphocytes in HIV-1 Infection," <i>Nature</i> 373:123-126	
	34.	HSIEH, Elaine A. et al. (2004) "Dynamics of Keratinocytes in Vivo Using 2H2O Labeling: A Sensitive Marker of Epidermal Proliferation State," <i>J Invest Dermatol</i> , 123: 530-536	
	35.	MESSMER, Bradley T. et al. (Feb. 10, 2005) "In Vivo Measurements Document the Dynamic Cellular Kinetics of Chronic Lymphocytic Leukemia B Cells," <i>J. Clin. Invest.</i> doi:10.1172/JCI200523409	
	36.	PARK, S. S., et al. (1997) "Measurement of Small Intestinal Cell Turnover with [6,6, 2H2] Glucose," <i>Berkeley Scientific, Abstract</i> 1(2):41-43	
	37.	NEESE, R. A. et al. (Nov. 2002) "Measurement in vivo of Proliferation Rates of Slow Turnover Cells by 2H2O Labeling of the Deoxyribose Moiety of DNA," <i>PNAS</i> , 99(24): 15345-15350	
	38.	SMITH, et al. (1983) "The Phosphogluconate Oxidative Pathway," in <i>Principles of Biochemistry</i> , 7th edition, McGraw-Hill Book Company, pp. 417-423.	
	39.	WOLFE, R. (1990) "Isotopic Measurement of Glucose and Lactate Kinetics," <i>Ann. Med.</i> 22:163-170	

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		Number-Kind Code ² (if known)			
BS	1.	US-5,338,686	08-16-1994	Hellerstein	
	2.	US-5,910,403	06-08-1999	Hellerstein	
	3.	US-6,010,846	01-04-2000	Hellerstein	
	4.	US-6,461,806	10-08-2002	Hellerstein	
	5.	US-6,653,090-B1	11-25-2003	Lopaschuk	
	6.	US-6,602,715-B2	08-05-2003	Yatscoff et al.	
	7.	US-6,599,750-B2	07-29-2003	Yatscoff et al.	
	8.	US-6,468,802-B1	10-22-2002	Yatscoff et al.	
	9.	US-6,461,870-B2	10-08-2002	Yatscoff et al.	
	10.	US-20030068634-A1	05-24-2002	Hellerstein	
	11.	US-20030133871-A1	10-23-2002	Hellerstein	
	12.	US-20030224420-A1	04-04-2003	Hellerstein	
	13.	US-20040115131-A1	06-17-2004	Hellerstein	
	14.	US-5,961,470	10-05-1999	Wagner et al.	
	15.	US-20030228259-A1	12-11-2003	Hellerstein	
	16.	US-20040081994-A1	04-29-2004	Hellerstein	
	17.	US-10/944,154		Hellerstein	
	18.	US-10/963,967		Hellerstein	
	19.	US-10/872,280		Hellerstein	
	20.	US-10/997,323		Hellerstein	
	21.	US-6,808,875	10-26-2004	Hellerstein	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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BS	22.	WO-WO 98/51820	11-19-1998		

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BS	23.	International Search Report mailed August 18, 2004, for PCT application PCT/US03/23340, filed July 25, 2003, 2004: 4 pages	
Examiner Signature			Date Considered
			7/20/06

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ALTERNATIVE TO PTO/SB/08a/b (06-03)

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				Art Unit	Not Yet Assigned
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38	24.	International Search Report mailed on April 13, 2004, for PCT application no. PCT/US03/20052 filed on June 25, 2003, 3 pages	
	25.	International Search Report mailed on August 18, 2004, for PCT application PCT/US03/29526, filed September 16, 2003, 3 pages	
	26.	International Search Report mailed on January 19, 2005, for PCT patent application no. PCT/US03/29361 filed on September 15, 2003, 4 pages	
	27.	International Search Report mailed on July 9, 2004, for PCT patent application no. PCT/US03/35107 filed on November 4, 2003, 2 pages	
	28.	International Search Report mailed on June 29, 2004, for PCT patent application no. PCT/US03/04183 filed on February 12, 2003, 4 pages	
	29.	AIRHART, J. et al. (1974) "Compartmentation of Free Amino Acids for Protein Synthesis in Rat Liver" <i>Biochem J.</i> 140: 539-545	
	30.	AJIE, H.O. et al. (1995) "In Vivo Study of the Biosynthesis of Long-Chain Fatty Acids Using Deuterated Water" <i>Am. J. Physiol.</i> 269: E247-E252	
	31.	ANTELO, Fernando et al. (2002) "Adipose Triglyceride (TG) Turnover and De Novo Lipogenesis (DNL) in Humans: Measurement by Long-Term ² H ₂ O Labeling and Mass Isotopomer Distribution Analysis (MIDA)" <i>Experimental Biology</i> 16 [Meeting Abstract 361.10]: A400	
	32.	ATTARDI, Giuseppe et al. (1988) "Biogenesis of Mitochondria." <i>Ann. Rev. Cell Biol.</i> 4:289-333	
	33.	BACH, Simon P. et al. (2000) "Stem Cells: The Intestinal Stem as a Paradigm" <i>Carcinogenesis</i> 21(3): 469-476	
	34.	BANDSMA, Robert H.J. et al. (1998) "Contribution of Newly Synthesized Cholesterol to Rat Plasma and Bile Determined by Mass Isotopomer Distribution Analysis: Bile-Salt Flux Promotes Secretion of Newly Synthesized Cholesterol into Bile" <i>Biochem. J.</i> 329: 699-703	
	35.	BANDSMA, Robert H.J. et al. (2000) "The Contribution of Newly Synthesized Cholesterol to Bile Salt Synthesis in Rats Quantified By Mass Isotopomer Distribution Analysis" <i>Biochemica et Biophysica Acta</i> 1483: 343-351	
	36.	BERTANI, Roberta et al. (January 2002) "Measurement of Total Body Water (TBW) Through In Vivo Dilution of Tracer Compounds: Use of D ₂ O and its Determination by FT Infrared Spectroscopy" <i>Annali di Chimica</i> 92:135-138	
	37.	BICKENBACH, J.R. (1981) "Identification and Behavior of Label-Retaining Cells in Oral Mucosa and Skin" <i>J Dent Res</i> 1611-1620	
	38.	BIER, D.M. (1997) "Stable Isotopes in Biosciences, Their Measurement and Models for Amino Acid Metabolism" <i>Eur J Pediatr</i> 156 [Supp. 1]: S2-S8	
✓	39.	BINGHAM, S.A. (January 1994) "The Use of 24-h Urine Samples and Energy Expenditure to Validate Dietary Assessments" <i>American Journal of</i>	

Examiner Signature	<i>John R.</i>	Date Considered	7/20/06
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sf-1840868



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		Art Unit	Not Yet Assigned		
		Examiner Name	Not Yet Assigned		
Sheet	3	of	10	Attorney Docket Number	416272003900

		<i>Clinical Nutrition</i> 59 [1 Supp.]: 227S-231S	
B P	40.	BLAIR, Steven N. et al. (1995) "Changes in Physical Fitness and All-Cause Mortality: A Prospective Study of Healthy and Unhealthy Men." <i>JAMA</i> 273(14): 1093-1098	
	41.	BONOTTO, S. et al. (1977) "Study of the Distribution and Biological Effects of 3H in the Algae <i>Acetabularia</i> , <i>Chlamydomonas</i> and <i>Porphyra</i> " <i>Current Topics in Radiation Quarterly</i> 12: 115-132	
	42.	BRAVO, Elena et al. (1994) "Decreased Hepatic Uptake and Processing of High Density Lipoprotein Unesterified Cholesterol and Cholesteryl Ester with Age in the Rat" <i>J. Biochem.</i> 116: 1088-1095	
	43.	BROWN, Alan S. et al (1998) "Treating Patients with Documented Atherosclerosis to National Cholesterol Education Program-Recommended Low-Density-Lipoprotein Cholesterol Goals with Atorvastatin, Fluvastatin, Lovastatin and Simvastatin" <i>J. Am. Coll. Cardiol.</i> 32: 665-672	
	44.	CHINKES, David L. et al. (1996) "Comparison of Mass Isotopomer Dilution Methods Used to Calculate VLDL Production in Vivo" <i>Am. J. Physiol.</i> 271 (Endocrinol. Metab. 34): E373-E383	
	45.	CHRISTIANSEN Mark P. et al. (October 2000) "Effect of Dietary Energy Restriction on Glucose Production and Substrate Utilization in Type 2 Diabetes" <i>Diabetes</i> 49: 1691-1699	
	46.	CLAYTON, David (1991) "Replication and Transcription of Vertebrate Mitochondrial DNA" <i>Annu. Rev. Cell Biol.</i> 7:453-478	
	47.	CONRADS, Thomas P. et al. (January 2002) "Stable Isotope Labeling in Proteomics" <i>The Synthesis Cambridge Isotope Laboratories</i> 3 (2): 1-3	
	48.	CRAIG, Suzanne B. et al. (September 1996) "The Impact of Physical Activity on Lipids, Lipoproteins, and Blood Pressure in Preadolescent Girls" <i>Pediatrics</i> 98 (3): 389-395	
	49.	DAVIS, Ajuah et al. (July 2000) "Effect of Pinitol Treatment on Insulin Action in Subjects With Insulin Resistance" <i>Diabetes Care</i> 23 (7):1000-1005	
	50.	DEEKS, Steven G. et al. (2002) "CD4+ T Cell Kinetics and Activation in Human Immunodeficiency Virus-Infected Patients Who Remain Viremic Despite Long-Term Treatment with Protease Inhibitor-Based Therapy" <i>Journal of Infectious Diseases</i> 185:315-323	
	51.	DEKKER, Evelien et al. (1997) "Glucose Homeostasis in Children with Falciparum Malaria: Precursor Supply Limits Gluconeogenesis and Glucose Production" <i>J Clin Endocrinol Metabol</i> 82: 2514-2521	
	52.	ETNIER, E.L. et al. (1984) "Metabolism of Organically Bound Tritium in Man" <i>Radiat. Res.</i> 100: 487-502	
✓	53.	FAGERQUIST, Clifton K. et al. (1999) "Molecular Ion Fragmentation and Its	

Examiner Signature	<i>Shu B.</i>	Date Considered	7/20/06
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ALTERNATIVE TO PTO/SB/08a/b (06-03)

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Sheet	4	of	10	Attorney Docket Number	416272003900

		Effects on Mass Isotopomer Abundance of Fatty Acid Methyl Estes Ionized By Electron Impact." <i>J Am Soc Mass Spectrom</i> 10: 430-439	
B-9	54.	FAGERQUIST, Clifton K. et al. (2001) "Elimination of the Concentration Dependence in Mass Isotopomer Abundance Mass Spectrometry of Methyl Palmitate Using Metastable Atom Bombardment." <i>J Am Soc Mass Spectrom</i> 12:754-761	
	55.	GOZ, Barry (1978) "The Effects of Incorporation of 5-Halogenated Deoxyuridines into DNA of Eukaryotic Cells" <i>Macological Reviews</i> 29, (4): 249-272	
	56.	GYGI, Steven et al. (2000) "Using Mass Spectrometry for Quantitative Proteomics" <i>Proteomics: A Trends Guide</i> : 31-36	
	57.	HANSEN, Andrew P. et al. (1992) "A Practical Method for Uniform Isotopic Labeling of Recombinant Proteins in Mammalian Cells" <i>Biochemistry</i> 31 (51): 12713-12718.	
	58.	HELLERSTEIN, M. et al. (1999) "Directly Measured Kinetics of Circulating T Lymphocytes in Normal and HIV-1-Infected Humans" <i>Nature Medicine</i> 5 (1):83-89	
	59.	HELLERSTEIN, M. K. et al. (1992) "Mass Isotopomer Distribution Analysis: a Technique for Measuring Biosynthesis and Turnover of Polymers" <i>Am J Physiol</i> 263: E988-E1001	
	60.	HELLERSTEIN, M.K. et al. (1994) "Mass Isotopomer Distribution Analysis for Measuring Fluxes Through Intracellular Metabolic Pathways and Biosynthetic Rates of Polymers" <i>IFAC Modeling and Control in Biomedical Systems</i> , pages 353-359	
	61.	HELLERSTEIN, M.K. et al. (1997) "Hepatic Gluconeogenic Fluxes and Glycogen Turnover During Fasting in Humans." <i>J. Clin. Invest.</i> 100(5): 1305-1319	
	62.	HELLERSTEIN, Marc K. (1995) "Methods for Measurement of Fatty Acid and Cholesterol Metabolism" <i>Current Opinion in Lipidology</i> 6: 172-181	
	63.	HELLERSTEIN, Marc K. (1999) "Measurement of T-Cell Kinetics: Recent Methodologic Advances" <i>Trends Immunology Today</i> 20(10): 438-441	
	64.	HELLERSTEIN, Marc K. (1999) "The Changing Face of AIDS: Translators Needed" <i>Am J Clin Nutr</i> 70: 787-788	
	65.	HELLERSTEIN, Marc K. (2001) "No Common Energy: de Novo Lipogenesis as the Road Less Traveled" <i>Am J Clin Nutr</i> 74:707-708	
	66.	HELLERSTEIN, Marc K. (2002) "Carbohydrate-Induced Hypertriglyceridemia: Modifying Factors and Implications for Cardiovascular Risk" <i>Curr Opin Lipidol</i> 13: 33-40	
✓	67.	HELLERSTEIN, Marc K. (2003) "In Vivo Measurement of Fluxes Through	

Examiner Signature	<i>John R.</i>	Date Considered	2/20/06
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sf-1840868



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
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Sheet	5	of	10	Attorney Docket Number	416272003900

		Metabolic Pathways: The Missing Link in Functional Genomics and Pharmaceutical Research" <i>Annu. Rev. Nutr.</i> 23: 379-402	
88	68.	HELLERSTEIN, Marc K. et al. (1986) "Glycoconjugates as Noninvasive Probes of Intrahepatic Metabolism: Pathways of Glucose Entry into Compartmentalized Hepatic UDP-glucose Pools during Glycogen Accumulation." <i>Proceedings of the National Academy of Sciences of the United States of America</i> 83, Issue 18: 7044-7048	
	69.	HELLERSTEIN, Marc K. et al. (1993) "Model for Measuring Absolute Rates of Hepatic de Novo Lipogenesis and Reesterification of Free Fatty Acids." <i>Am. J. Physiol.</i> 265: E814-E820	
	70.	HELLERSTEIN, Marc K. et al. (1994) "Effects of Cigarette Smoking and its Cessation on Lipid Metabolism and Energy Expenditure in Heavy Smokers." <i>J. Clin. Invest.</i> 93: 265-272	
	71.	HELLERSTEIN, Marc K. et al. (1997) "Altered Fluxes Responsible For Reduced Hepatic Glucose Production and Gluconeogenesis by Exogenous Glucose in Rats." <i>Am. J. Physiol.</i> 272: E163-E172	
	72.	HELLERSTEIN, Marc K. et al. (1997) "Measurement of Hepatic Ra UDP-glucose in Vivo in Rats: Relation to Glycogen Deposition and Labeling Patterns" <i>Am. J. Physiol.</i> 272: E155-E162	
	73.	HELLERSTEIN, Marc K. et al. (1999) "Mass Isotopomer Distribution Analysis at Eight Years: Theoretical, Analytic, and Experimental Considerations." <i>Am. J. Physiol.</i> 276: E1146-E1170	
	74.	HELLERSTEIN, Marc K. et al. (2002) "Measurement of Synthesis Rates of Slow-turnover Proteins from 2H2O Incorporation into Non-essential Amino Acids (NEAA) and Application of Mass Isotopomer Distribution Analysis (MIDA)" <i>Faseb Journal Experimental Biology</i> 2002: Meeting Abstracts 16: A256	
	75.	HOH, Rebecca et al. (1998) "De Novo Lipogenesis Predicts Short-Term Body-Composition Response by Bioelectrical Impedance Analysis to Oral Nutritional Supplements in HIV-Associated Wasting." <i>Am. J. Clin. Nutr.</i> 68:154-163	
	76.	HUDGINS, Lisa C. et al. (2000) "Relationship Between Carbohydrate-Induced Hypertriglyceridemia and Fatty Synthesis in Lean and Obese Subjects." <i>J. Lipid Res.</i> 41:595-604	
	77.	HUDGINS, Lisa Cooper et al. (1996) "Human Fatty Acid Synthesis is Stimulated by a Eucaloric Low Fat, High Carbohydrate Diet" <i>J. Clin. Invest.</i> 97(9): 2081-2091	
α	78.	HUMPHREY, Thomas J. et al. (1975) "A New Method for the Measurement of Protein Turnover" <i>Biochem. J.</i> 148: 119-127	

Examiner Signature	<i>Shm R</i>	Date Considered	2/20/06
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ALTERNATIVE TO PTO/SB/08a/b (06-03)

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Sheet	6	of	10	Attorney Docket Number	416272003900

BS	79.	HUMPHREY, Thomas J. et al. (1976) "A Sensitive Method for Measuring Protein Turnover Based on the Measurement of 2-3H-labeled Amino Acids in Proteins" <i>Biochem. J.</i> 156: 561-568
	80.	JENNINGS, Graham et al. (July 1999) "The Use of Infrared Spectrophotometry for Measuring Body Water Spaces." <i>Clinical Chemistry</i> 45(7): 1077-1081
	81.	JONES, Peter J.H. et al. (1994). "Interaction of Dietary Fat Saturation and Cholesterol Level on Cholesterol Synthesis Measured Using Deuterium Incorporation" <i>Journal of Lipid Research</i> 35: 1093-1101
	82.	JUNG, Hye Rim. et al. (1999) "Metabolic Adaptations to Dietary Fat Malabsorption in Chylomicron-Deficient Mice" <i>Biochem. J.</i> 343: 473-478
	83.	JUNGAS, Robert L. (1698) "Fatty Acid Synthesis in Adipose Tissue Incubated in Tritiated Water" <i>Biochemistry</i> 7(10): 3708-3717
	84.	KATZ, J. et al. (1976) "Futile Cycles in the Metabolism of Glucose" <i>Curr Top Cell Regul</i> 10: 237-89
	85.	KELLEHER, Joanne K. et al. (1992) "Model Equations for Condensation Biosynthesis Using Stable Isotopes and Radioisotopes" <i>Am. J. Physiol.</i> 262: E118-E125
	86.	KHAIRALLAH, Edward A. et al. (1976) "Mortimore. Assessment of Protein Turnover in Perfused Rat Liver: Evidence for Amino Acid Compartmentation from Differential Labeling of Free and tRNA-bound Valine" <i>J Biol Chem</i> 251(5): 1375-1384
	87.	KIM, J. et al. (2000) "A New Stable Isotope-Mass Spectrometric (MS) Method to Measure Proliferation Rates of Colon Epithelial Cells" <i>Faseb Journal</i> 14(4): A718
	88.	LAMMERT, Ole et al. (2000) "Effects of Isoenergetic Overfeeding of Either Carbohydrate or Fat in Young Men" <i>British Journal of Nutrition</i> 84:233-245
	89.	LEE, Chong Do et al. (1999) "Cardiorespiratory Fitness, Body Composition, and All-Cause and Cardiovascular Disease Mortality in Men 1-3" <i>Am J Clin Nutr</i> 69:373-380
	90.	LEUNG, Gordon K. et al. (2000) "A Deficiency of Microsomal Triglyceride Transfer Protein Reduces Apolipoprotein B Secretion" <i>The Journal of Biological Chemistry</i> 275(11):7515-7520
	91.	LEWANCZUK, Richard Z. et al. (2004) "Comparison of the [13 C] Glucose Breath Test to the Hyperinsulinemic-Euglycemic Clamp When Determining Insulin Resistance" <i>Diabetes Care</i> 27(2):441-447
or	92.	LIPKIN, Martin et al. (1963) "Cell Proliferation Kinetics in the Gastrointestinal Tract of Man. I. Cell Renewal in Colon and Rectum" <i>Journal of Clinical Investigations</i> 42(6):767-776

Examiner Signature	<i>Shu R.</i>	Date Considered	7/20/06
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Sheet	7	of	10	Attorney Docket Number	416272003900

B5	93.	MACALLAN, Derek C. et al. (1998) "Measurement of Cell Proliferation by Labeling of DNA with Stable Isotope-Labeled Glucose: Studies in Vitro, in Animals, and in Humans" <i>Proc. Natl. Acad. Sci.</i> 95: 708-713.
	94.	MAENTAUSTA, O. et al. (1979) "Radioimmunoassay of Conjugated Cholic Acid, Chenodeoxycholic Acid, and Deoxycholic Acid from Human Serum, with Use of 125I-Labeled Ligands" <i>Clin. Chem.</i> 25(2): 264-268
	95.	MATHUR-DE VRE, R. et al. (1984) "Molecular Aspects of Tritiated Water and Natural Water in Radiation Biology" <i>Prog. Biophys. Molec. Biol.</i> 43: 161-193
	96.	MCCUNE, Joseph M. et al. (2000) "Factors Influencing T-Cell Turnover in HIV-1-Seropositive Patients" <i>J. Clin. Invest.</i> 105:R1-R8
	97.	MEWISSEN, D.J. et al. (1977) "Comparative Incorporation of Tritium from Tritiated Water Versus Tritiated Thymidine, Uridine or Leucine" <i>Curr Top Rad Res Quart</i> 12: 225-254
	98.	MISELL, L. et al. (2000) "A new in Vivo Stable Isotope Method for Measuring Mammary Epithelial Cell Proliferation" <i>Faseb Journal Experimental Biology</i> 2000 14(4), Meeting Abstract 550.5: A786
	99.	MOHRI, Hiroshi et al. (2001) "Increased Turnover of T Lymphocytes in HIV-1 Infection and its Reduction by Antiretroviral Therapy." <i>J. Exp. Med.</i> 194(9): 1277-1287
	100.	MORRIS, Rebecca J. et al. (1997) "Evidence that a Slowly Cyling Subpopulation of Adult Murine Epidermal Cells Retains Carcinogen" <i>Cancer Research</i> 46: 3061-3066
	101.	MORRIS, Rebecca J. et al. (1997) "Evidence that Cutaneous Carcinogen-initiated Epithelial Cells from Mice are Quiescent Rather than Actively Cyling" <i>Cancer Research</i> 57:3436-3443
	102.	NEESE, R. A. et al. (1993) "Measurement of Endogenous Synthesis of Plasma Cholesterol in Rats and Humans Using MIDA" <i>Am. J. Physiol.</i> 264: E139-E147
	103.	NEESE, Richard A. et al. (1995) "Gluconeogenesis and Intrahepatic Triose Phosphate Flux in Response to Fasting or Substrate Loads" <i>Journal of Biological Chemistry</i> 270(24): 14452-14463
	104.	NEESE, Richard A. et al. (2001) "Advances in the Stable Isotope-Mass Spectrometric Measurement of DNA Synthesis and Cell Proliferation" <i>Analytical Biochemistry</i> 298(2): 189-195
	105.	ONG, Shao-En et al. (2002) "Stable Isotope Labeling by Amino Acids in Cell Culture, SILAC, as a Simple and Accurate Approach to Expression Proteomics" <i>Molecular and Cellular Proteomics</i> 1: 376-386
✓	106.	PANTALEO, Giuseppe (1999) "Unraveling the Strands of HIV's Web"

Examiner Signature	<i>John R.</i>	Date Considered	2/20/06
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sf- 1840868



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		<i>Nature Medicine</i> 5(1): 27-28	
BP	107.	PAPAGEORGOPOULOS, Christina et al. (1999) "Measuring Protein Synthesis by Mass Isotopomer Distribution Analysis (MIDA)" <i>Analytical Biochemistry</i> 267: 1-16	
	108.	PARKS, Elizabeth J. et al. (1999) "Effects of a Low-Fat, High-Carbohydrate Diet on VLDL-Triglyceride Assembly, Production, and Clearance" <i>J. Clin. Invest.</i> 104(8): 1087-1096	
	109.	PARKS, Elizabeth J. et al. (2000) "Carbohydrate-induced Hypertriacylglycerolemia: Historical Perspective and Review of Biological Mechanisms" <i>Am. J. Nutr.</i> 71: 412-433	
	110.	PARKS, Elizabeth J. et al. (2000) "Dependence of Plasma α -Tocopherol Flux on Very Low-Density Triglyceride Clearance in Humans" <i>Free Radical Biology & Medicine</i> 29(11): 1151-1159	
	111.	PAŠA-TOLIC, Ljiljana et al. (1999) "High Throughput Proteome-Wide Precision Measurements of Protein expression Using Mass Spectrometry" <i>J. Am. Chem. Soc.</i> 121: 7949-7950	
	112.	PATTERSON, Bruce W. (1993) "Concentration Dependence of Methyl-Palmitate Isotope Ratios by Electron Impact Ionization Gas Chromatography/Mass Spectrometry" <i>Biol. Mass Spectrom.</i> 22: 481-486	
	113.	POZHARISSKI, K.M. et al. (1980) "Study of Kinetics of Epithelial Cell Populations in Normal Tissues of the Rat's Intestines and in Carcinogenesis." <i>Exp. Path., Bd.</i> 18:387-406	
	114.	PREVIS, Stephen F. et al. (2001) "Estimation of Protein Turnover In Vivo Using D2O" <i>Diabetes Abstract Book, 61st Scientific Sessions</i> 50[Supplement 2]: A301	
	115.	ROBERTS, S.B. (1989) "Use of the Doubly Labeled Water Method for Measurement of Energy Expenditure, Total Body Water, Water Intake, and Metabolizable Energy Intake in Humans and Small Animals" <i>Can. J. Physiol. Pharmacol.</i> 67(10): 1190-1198	
	116.	ROBIN, Eugene D. et al. (1988) "Mitochondria DNA Molecules and Virtual Number of Mitochondria per Cell in Mammalian Cells" <i>Journal of Cellular Physiology</i> 136:507-513	
	117.	ROCHA, B. et al. (1990) "Accumulation of Bromodeoxyuridine-Labelled Cells in Central and Peripheral Lymphoid Organs: Minimal Estimates of Production and Turnover Rates of Mature Lymphocytes" <i>Eur. J. Immunol.</i> 20:1697-1708	
	118.	RODA, Aldo et al. (1980) "Results with Six 'Kit' Radioimmunoassays for Primary Bile Acids in Human Serum Intercompared" <i>Clin. Chem.</i> 26(12): 1677-1682	

Examiner Signature	<i>Sh R</i>	Date Considered	7/20/06
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119.	SCHWARZ, Jean-Marc et al. (1995) "Short-Term Alterations in Carbohydrate Energy Intake In Humans" <i>J. Clin. Invest.</i> 96: 2735-2743
120.	SHEVCHENKO, Andrej et al. (1997) "Rapid 'de Novo' Peptide Sequencing by a Combination of Nanoelectrospray, Isotopic Labeling and a Quadrupole/Time-of-flight Mass Spectrometer" <i>Rapid Commun. Mass Spectrom.</i> 11: 1015-1024
121.	SILER, Scott Q. et al. (1998) "The Inhibition of Gluconeogenesis Following Alcohol in Humans" <i>Am. J. Physiol.</i> 275: E897-E907
122.	SILER, Scott Q. et al. (1998) "VLDL-Triglyceride Production After Alcohol Ingestion, Studied Using [2-13C1] Glycerol" <i>J. Lipid Res.</i> 39: 2319-2328
123.	SUNTER, J.P. et al. (1978) "Cell Population Kinetics in the Epithelium of the Colon of the Male Rat." <i>Virchows Archiv. B Cell Path.</i> 26: 275-287
124.	TEIXEIRA, Lucil�ia et al. (2001) "Poor CD4 T Cell Restoration After Suppression of HIV-1 Replication May Reflect Lower Thymic Function" <i>AIDS</i> 15(14):1749-1756
125.	TINT, G.S. et al. (1974) "Transformation of 5�-cholest-7-en-3�-ol to Cholesterol and Cholesterol in Cerebrotendinous Xanthomatosis" <i>Journal of Lipid Research</i> 15: 256-262
126.	TRAPPE, T. A. et al. (2002) "Effect of Ibuprofen and Acetaminophen on Postexercise Muscle Protein Synthesis" <i>Am J Physiol Endocrinol Metab</i> 282: E551-E556
127.	TURNER, Scott M. et al. (2002) "Measurement of Triglyceride (TG) Synthesis in Vivo 2H2O Incorporation into TG-Glycerol and Application of Mass Isotopomer Distribution Analysis (MIDA)." <i>Experimental Biology 2002</i> 16[Meeting Abstract 361.9]: A400
128.	VAN HINSBERGH, V.W.M. et al. (1978) "Palmitate Oxidation by Rat Skeletal Muscle Mitochondria" <i>Archives of Biochemistry and Biophysics</i> 190(2): 762-771
129.	VAN LOAN, Marta D. et al. (1999) "Monitoring Changes in Fat-Free Mass in HIV-Positive Men With Hypotestosteronemia and AIDS Wasting Syndrome Treated With Gonadal Hormone Replacement Therapy" <i>AIDS</i> 13:241-248
130.	VEENSTRA, Timothy D. et al. (2000) "Proteome Analysis Using Selective Incorporation of Isotopically Labeled Amino Acids" <i>J. Am. Soc. Mass Spectrom.</i> 11: 78-82
131.	VEERKAMP, Jacques H. et al. (1986) "14CO2 Production Is No Adequate Measure of [14C]Fatty Acid Oxidation" <i>Biochemical Medicine and Metabolic Biology</i> 35: 248-259
132.	V�NIANT, Murielle M. et al. (2000) "Defining the Atherogenicity of Large and Small Lipoproteins Containing Apolipoproteins B100" <i>J. Clin. Invest.</i>

Examiner Signature	<i>Sh R.</i>	Date Considered	2/20/06
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		106(12): 1501-1510	
B.P.	133.	WANG, Wei et al. (2000) "Effects of Nicotinic Acid on Fatty Acid Kinetics, Fuel Selection, and Pathways of Glucose Production in Women." <i>Am. J. Physiol. Endocrinol. Metab.</i> 279: E50-E59	
	134.	WATERLOW, J.C. (1980) "Protein Turnover in the Whole Animal" <i>Invest. Cell Pathol.</i> 3: 107-119	
	135.	WINETT, Richard et al. (2000) "Exercise Regimens for Men With HIV." <i>JAMA</i> 284(2): 175-6	
	136.	WOLF, George (1995) "The Effect of Fasting and Fructose and Glucose Infusion on Gluconeogenesis and Triose Phosphate Flux in Rats in Vivo" <i>Nutrition Reviews</i> 53(10): 299-302	

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¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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